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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,293	11/13/2000	Jean-Louis Ruelle	BM45321	3367

25308 7590 10/22/2002

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PHILADELPHIA, PA 19103

EXAMINER

BASKAR, PADMAVATHI

ART UNIT	PAPER NUMBER
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1645

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/700,293		RUELLE, JEAN-LOUIS	
	Examiner		Art Unit	
	Padmavathi v Baskar		1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/23/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 60-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The Examiner of U.S. Patent application S.N. 09/700,293 has changed. In order to expedite the correlation of papers with the application please direct all future correspondence to the Examiner, Technology Center 1600, Art Unit 1645.

Priority

2. This application is a 371 of PCT/EP99/03255 filed on 5/7/1999. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy Application No. United Kingdom 9810276 filed on 5/13/1998 has been placed in the application. The examiner has reviewed the priority documents and found that SEQ.ID.NO 2 containing 594 amino acid polypeptide has been disclosed in the application United Kingdom 9810276 filed on 5/13/1998 and therefore, claims 60-67 with respect to SEQ.ID.NO: 2 are granted priority as of 5/13/1998. However, claims 60-67 with respect to SEQ.ID.NO: 4 gets priority as of the filing date of PCT/EP99/03255 filed on 5/7/1999. The examiner would appreciate the applicant if the applicant can clarify about two sets of sequences one with the missing amino acid as shown in figure2 and one without as shown as SEQ.ID.NO: 2. It is not clear to the examiner when these changes have been made to these sequences.

Information Disclosure Statement

3. No Information Disclosure Statement has been filed with this application.

Election

4. Applicant's response to restriction filed on 7/23/02, paper # 5 is acknowledged. Claims 26-59 have been canceled. New claims 60-67 have been added. Applicant's election without traverse Group 1 claims 26- 38, 52-53 and 58 drawn to polypeptide is acknowledged. Claims 26-38, 52-53 and 58 have been cancelled and replaced with new claims 60-67 drawn to polypeptide. Claims 60-67 are under examination.

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Specification - Informalities

5. It is noted that Abstract of the Disclosure is missing. If applicant desires to include the abstract from PCT/EP99/03255, the Office would consider and a copy of the abstract will be inserted in to the specification.

There is no brief description of the drawing as set forth in 37 C.F.R.1.74

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 60-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 60 is rejected as being vague and indefinite for the recitation of "matching." As written it is impossible to understand whether applicant is claiming amino acid sequence SEQ.ID.NO: 2 or 4 or some other sequence which matches with SEQ.ID.NO: 2 or 4 any where in the sequence.

Claim 61 objected to because of the following informalities: claim 61 depends from claim 61. It should depend from claim 60. Appropriate correction is required.

Claim 67 recites the limitation " vaccine" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) The invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 60-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Peak et al 2001. U.S.Patent 6,197,312.

Claims are directed to an isolated polypeptide comprising an amino acid sequence matching SEQ.ID.NO: 2 or SEQ.ID.NO: 4 and an immunogenic fragment of at least 15 amino acids, fusion protein comprising the same and immunogenic comprising the same.

Peak et al disclose an isolated polypeptide SEQ.ID.NO: 9 comprising an amino acid sequence that contains 594 amino acids and matches with SEQ.ID.NO: 2 in column 55-57 and claims U.S.Patent 6,197,312 (also see the attached sequence alignment also). Further, the prior art also discloses immunogenic fragments containing at least 50 amino acids that include

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15-20 amino acids of the claimed invention (see claim 5), fusion proteins (see figure 1 and examples 2-4) and immunogenic compositions (see claims 7-10). The prior art anticipated the claimed invention.

Status of Claims

9. No claims are allowed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Padma Baskar whose telephone number is (703) 308-8886. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4 PM EST

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (703) 308-3909. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Padma Baskar Ph.D.

10/10/02



**MARK NAVARRO
PRIMARY EXAMINER**

RESULT 1
 US-09-377-155-9
 ; Sequence 9, Application US/09377155
 ; Patent No. 6197312
 ; GENERAL INFORMATION:
 ; APPLICANT: PEAK, Ian Richard Anselm
 ; APPLICANT: JENNINGS, Michael Paul
 ; APPLICANT: MOXON, E. Richard
 ; TITLE OF INVENTION: NOVEL SURFACE ANTIGEN
 ; FILE REFERENCE: 065064/0128
 ; CURRENT APPLICATION NUMBER: US/09/377,155
 ; CURRENT FILING DATE: 1999-08-19
 ; PRIOR APPLICATION NUMBER: PCT/AU98/01031
 ; PRIOR FILING DATE: 1998-12-14
 ; PRIOR APPLICATION NUMBER: GB 9726398.2
 ; PRIOR FILING DATE: 1997-12-12
 ; NUMBER OF SEQ ID NOS: 33
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 9
 ; LENGTH: 594
 ; TYPE: PRT
 ; ORGANISM: Neisseria meningitidis
 US-09-377-155-9

Query Match 100.0%; Score 3019; DB 4; Length 594;
 Best Local Similarity 100.0%; Pred. No. 1.5e-226;
 Matches 594; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MNKIYRIIWN	SALNAWVAVSEL	TRNHTKRASAT	VATAVLATLLFATVQASTTDDDDLYLE	60
Db	1	MNKIYRIIWN	SALNAWVAVSEL	TRNHTKRASAT	VATAVLATLLFATVQASTTDDDDLYLE	60
QY	61	PVQRTAVVLS	SFRSDKEGTGE	KEVTEDSNWGVYFDKKGVL	TAGTITLKAGDNLKIKQNTNE	120
Db	61	PVQRTAVVLS	SFRSDKEGTGE	KEVTEDSNWGVYFDKKGVL	TAGTITLKAGDNLKIKQNTNE	120
QY	121	NTNASSFTYSL	KKDLTDLTSVG	TEKLSFSANSNKVNITSDTKGLN	FAKKTAEETNGDITVH	180
Db	121	NTNASSFTYSL	KKDLTDLTSVG	TEKLSFSANSNKVNITSDTKGLN	FAKKTAEETNGDITVH	180
QY	181	LNGIGSTLTDL	TLNTGATTNVT	NDNVTDEKKRAASVKDVLNAGWN	IKGVKPGTTASDNV	240
Db	181	LNGIGSTLTDL	TLNTGATTNVT	NDNVTDEKKRAASVKDVLNAGWN	IKGVKPGTTASDNV	240
QY	241	DFVRTYDTVE	FLSADTKTTT	VNVESKDNGKRTEVKIGAKTSVIKE	KDGKLVTKDKGEND	300
Db	241	DFVRTYDTVE	FLSADTKTTT	VNVESKDNGKRTEVKIGAKTSVIKE	KDGKLVTKDKGEND	300
QY	301	SSTDKEGLVTA	KEVIDAVNKAG	WRMKTITANGQTGQADKFETVTS	SGTNVTFASGKGTTA	360
Db	301	SSTDKEGLVTA	KEVIDAVNKAG	WRMKTITANGQTGQADKFETVTS	SGTNVTFASGKGTTA	360
QY	361	TVSKDDQGNIT	VMYDVNVGDAL	NVNQLQNSGWNLDKAVAGSSGK	VISGNVSPSKGKMD	420
Db	361	TVSKDDQGNIT	VMYDVNVGDAL	NVNQLQNSGWNLDKAVAGSSGK	VISGNVSPSKGKMD	420
QY	421	TVNINAGNNIE	ITRNGKNIDIAT	SMTPOFSSVSLGAGADAPTL	SVDDGALNVGSKDANK	480
Db	421	TVNINAGNNIE	ITRNGKNIDIAT	SMTPOFSSVSLGAGADAPTL	SVDDGALNVGSKDANK	480
QY	481	PVRITNVAPGV	KEGDVTNVAQL	KGVAQNLNNHIDNVDGNARAGIA	QAIATAGLVQAYLPG	540
Db	481	PVRITNVAPGV	KEGDVTNVAQL	KGVAQNLNNHIDNVDGNARAGIA	QAIATAGLVQAYLPG	540
QY	541	KSMMAIGGGTY	RGEAGYAIGYSS	ISDGGNWIIGKTASGNSRGHFGAS	ASVGYQW	594
Db	541	KSMMAIGGGTY	RGEAGYAIGYSS	ISDGGNWIIGKTASGNSRGHFGAS	ASVGYQW	594